

IN THE DRAWINGS

Figures 3, 4, and 8 of the Drawings have been amended and included as Replacement Sheets. Specifically, Figure 4 has been renumbered as Fig. 4A and new Fig. 4B has been added.

REMARKS

Applicant gratefully acknowledges the Examiner's indication that claims 4-8 contain allowable subject matter, namely, that claim 4 would be allowable if rewritten in independent form and claims 5-8 would be allowable if amended to overcome the rejections under 35 U.S.C §112. Accordingly, claim 1 has been amended to include the elements of claim 4, and claim 4 has been cancelled. In addition, claims 5-8 have been amended to address the objections and §112 rejections discussed herein.

The specification has been amended to correct typographical numbering errors. Specifically, the discharge opening is corrected to 44b, the stationary partition plate is corrected to 42, the upper suction port and the lower suction port are correctly labeled 26c and 26b respectively, and the circulating device is correctly labeled 24. In addition, the specification has been amended to correlate with the addition of Fig. 4B.

The drawings have been amended to correct errors. For example, Figure 8 has been amended to correctly label "42a" as "43a". In addition, reference "21" has been added to Figs. 3 and 4. Finally, reference "26c" has been included in New Fig. 4B.

A. The Objections

The drawings were objected to for failing to include elements in the description, specifically, the upper suction port 26c and vacuum vessel 21. Accordingly, label "26c" has been included in Fig. 4B and label "21" has been added to Figs. 3 and 4.

In addition, Applicant respectfully asserts that the gas circulating device 24 allegedly not depicted in the drawings is shown in Figs. 3 and 4 as element "24."

The disclosure was objected to for informalities. Accordingly, as discussed above, the specification has been amended to overcome the objections.

Claim 8 was objected to for informalities and has been amended to delete “the” in front of “a cooling fan.”

B. The Rejections

Claims 5-8 were rejected under 35 U.S.C. §112 second paragraph for indefiniteness.

Claims 1 and 2 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,821,114 to Kisoda (hereafter “Kisoda”). Claim 3 was rejected on the grounds of claim 1 and further in view of U.S. Patent 4,963,091 to Hoetzi et al. (hereafter, “Hoetzi”).

C. Applicants’ Arguments

35 U.S.C. §112

Applicant asserts that the amendments to claims 5-7 clarify the claims to overcome the indefiniteness rejections of claims 5-8. For example, claim 5 has been amended to recite the clear transition, “comprising,” and to clarify that the “stationary partition plate includes at least one opening passing therethrough which allows gas to circulate between a suction port and a discharge port of the gas circulating device.” Support for the amendment may be found on page 25 lines 12-17 stating, “The stationary partition plate 42 partitions between the cooling chamber 22 and the gas cooling and circulating device 24, and shuts off therebetween. The rotary partition plate 44 is rotated along the outer surface of the stationary partition plate 42....” Further, on page 27, lines 15-18 the circulation is described, “The rotary partition plate 44 has a suction opening 44a and a discharge opening 44b which are partly communicated with a suction port and a discharge port of the gas cooling and circulating device.” In addition, the allegedly indefinite phrases “over the entire surface thereof” and “whereby directions of the gas passing through the cooling chamber are alternately switched” have been deleted from claim 5.

Claims 6 and 7 have been amended to clarify that “an opening position” refers to “a position of the suction opening and a position of the discharge opening.” Support for the amendment may be found on page 27, lines 15-18 of the specification, which states, “The rotary partition plate 44 has a suction opening 44a and a discharge opening 44b which are partly communicated with a suction port and a discharge port of the gas cooling and circulating device.”

35 USC §103(a)

Applicant respectfully asserts that in view of the present amendment, claim 1 and thus dependent claims 2-3 are not obvious because claim 1 has been amended to include the subject matter of cancelled claim 4, which, as discussed above, the Examiner indicated would be allowable if rewritten to include the limitations of the base claim.

CONCLUSION

For all of the above reasons, Applicant respectfully asserts that claims 1-3 and 5-8 are in condition for allowance and a prompt notice of allowance is earnestly solicited.

The below-signed attorney for applicant welcomes any questions.

Respectfully submitted,
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